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Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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HEINRICH, SAMUEL M

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1793

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/649,536  
Filing Date: August 26, 2003  
Appellant(s): BURNS ET AL.

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David G. Maire  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed November 16, 2007 appealing from the  
Office action mailed June 18, 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,951,892	Wolfa et al	09-1999
2003/0209859A1	Young et al	11-2003

6,443,813	Strom et al	09-2002
6,676,878	O'Brien et al	01-2004
2003/0101587A1	Rigney et al	06-2003
2004/0266615A1	Watson et al	12-2004

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 8-11, 13-17, 36, and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,951,892 to Wolfa et al in view of US20030209859A1 to

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Young et al and in view of USPN 6,443,813 to Strom et al and in view of USPN 6,676,878 to O'Brien et al.

Wolfa et al describe (Abstract) texturing deposited ceramic material by "utilizing a laser to cut a pattern into the surface". The laser cut depth is 0.01 to 0.1 inch (254 microns to 2.54 mm).

Young et al and Strom et al and O'Brien et al all describe multiple passes of a laser and all describe multiple laser energy parameters associated with the passes. Young et al describe [0024] forming different groove shapes using different respective beam shapes and describe [0026] excessive depth grooves as a result of multiple ablations. Strom et al describe (column 5, line 7+) "FIG. 7 illustrates ... directing laser beams to cut varying depths", and describe (column 5, lines 58+) "reduction of laser cutting power during the second and subsequent passes". O'Brien et al describe (column 7, lines 5+) "Lasers 14a and 14b ... may produce laser outputs 16a and 16b that have the same or different wavelengths" and "firing of lasers 14a and 14b is preferably coordinated" and will "produce a combined laser output". O'Brien et al describe (column 11, line 66 through column 12, line 41) consecutive passes "and "it is possible to change laser parameters during any given pass 132 to accommodate specific applications."

The use of multiple passes and multiple laser energy parameters in a laser cutting process would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because they provide variability to processes of manufacture in laser processing of ceramics.

The particular claimed size of the gap would have been obvious as a change in shape for some intended use. The dependent claims modify sizes, shapes, spacings, multiple shapes, laser delivery, etc., would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the particular layered work piece.

Claims 16, 17, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,951,892 to Wolfa et al in view of US20030209859A1 to Young et al and in view of USPN 6,443,813 to Strom et al and in view of USPN 6,676,878 to O'Brien et al as applied to claim 1 above, and further in view of US 20030101587A1 to Rigney et al and in view of US20040266615A1 to Watson et al.

Rigney et al describe (Abstract) repairing a damaged engraved layer by cleaning, grooving, and depositing. Watson et al describe [0063] forming multiple layers for multiple channels and describe surface deposit of ceramic material, etching the surface, and again depositing and laser grooving the surface in repair of buildup manufacture.

The instant claimed first coating and grooving and subsequent second coating and grooving would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on intended use such as for repair or for forming a known structure.

#### **(10) Response to Argument**

Applicant's arguments filed November 16, 2007 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

In response to applicant's argument that none of the cited prior art references nor their combination teaches or suggests the changing of a laser energy parameter from one pass to another in the same gap, note that the secondary references to Young et al, Strom et al, and O'Brien et al respectively describe changing groove shapes, reducing or changing laser power, and changing laser parameters during any pass. These secondary references repeat passes along the same path. The method of manufacturing an insulated component comprising changing a laser energy parameter from one pass to another in the same gap would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the known apparatus are capable of this operation and because the references to Young et al, Strom et al, and O'Brien et al all describe repeat cutting along a beam path and all describe variable beam properties.

In response to applicant's arguments against Young et al, Strom et al, and O'Brien et al individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that "neither Rigney nor Watson teach or suggest any overlying double grooved layers", further reading of these references shows this to be not true. Rigney et al describe (Abstract) repairing a damaged engraved layer by cleaning, grooving, and depositing. Watson et al describe [0063] forming multiple layers for multiple channels.

In response to applicant's arguments against Rigney et al and Watson et al individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Samuel M. Heinrich

/Samuel M Heinrich/

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TQAS TC 1700

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